# MINE CLEARING BLADE (MCB) DEADLINING COMPONENTS

(IAW MAINTENANCE SAFETY MESSAGE DATED MAY 95)



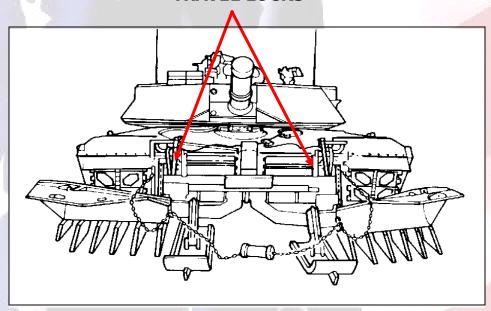
### WARNING

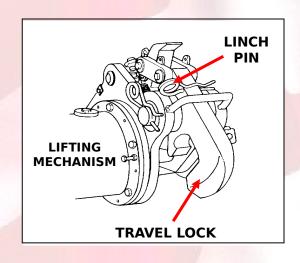
Death or serious injury to soldiers or damage to army equipment can occur if these instructions are not followed.

Any NMC deficiencies will deadline all mine clearing blade (MCB) operations. The MCB should be removed from the M1 until all NMC deficiencies are

## TRAVEL LOCKS/ LIFTING MECHANISM

TRAVEL LOCKS

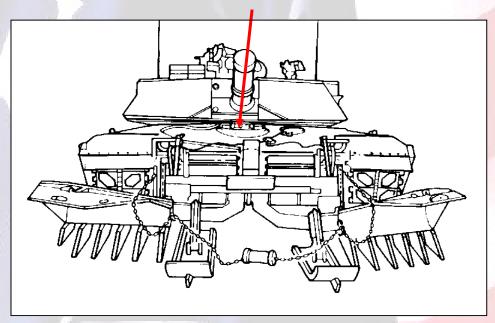


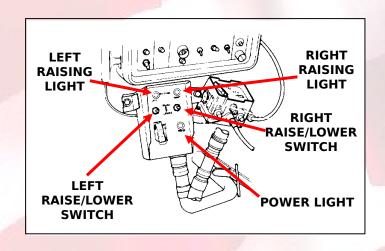


- 1. LEFT OR RIGHT BLADE WILL NOT RAISE.
- 2. EITHER LIFT MECHANISM FAILS TO SHUT OFF WHEN RAISE/LOWER SWITCH IS RELEASED.
- 3. ONE OR MORE LINCH PINS ARE MISSING.
- 4. EITHER LIFT MECHANISM SHOWS SIGNS OF OIL LEAKING.
- 5. LEFT OR RIGHT BLADE WILL NOT LOWER USING ELECTRICAL RELEASE.

## **CONTROL BOX**

#### **CONTROL BOX IN DRIVERS STATION**

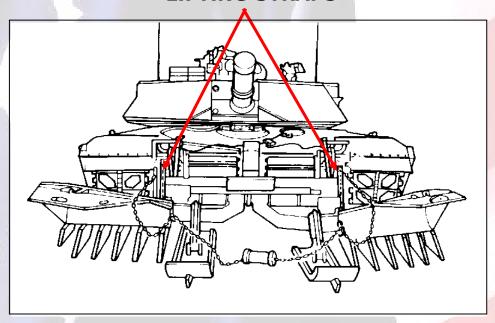


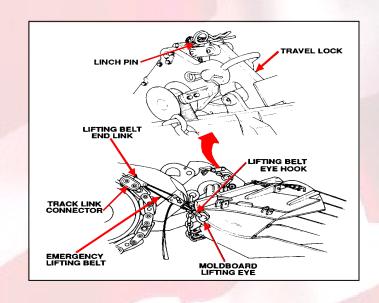


1. ANY LIGHT ON THE CONTROL BOX THAT DOES NOT WORK.

### LIFTING STRAPS

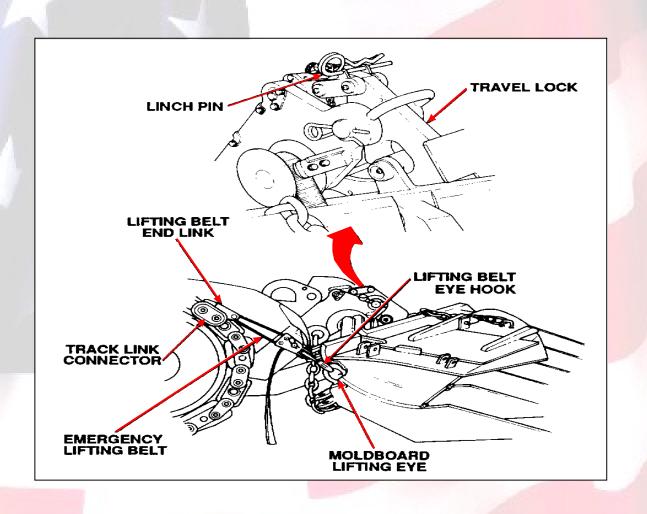
#### **LIFTING STRAPS**





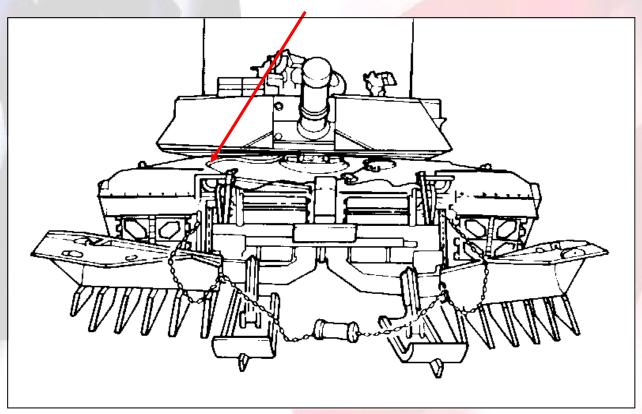
1. ANY STRAP BROKEN, CUT, OR FRAYED GREATER THAN 1/2 INCH (1.27 C

### LIFTING STRAPS



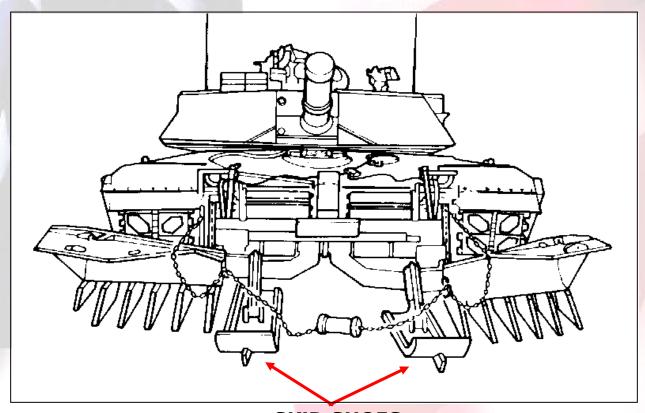
### **MAIN WIRING HARNESS**

#### **WIRING HARNESS**



- 1. ANY CUTS, BREAKS OR ANY PORTION OF THE CABLE IS DAMAGED
- 2. M1A2: ANY CUTS, BREAKS, DAMMAGED CONNECTORS OR CONNECTOI THAT WILL NOT LOCK

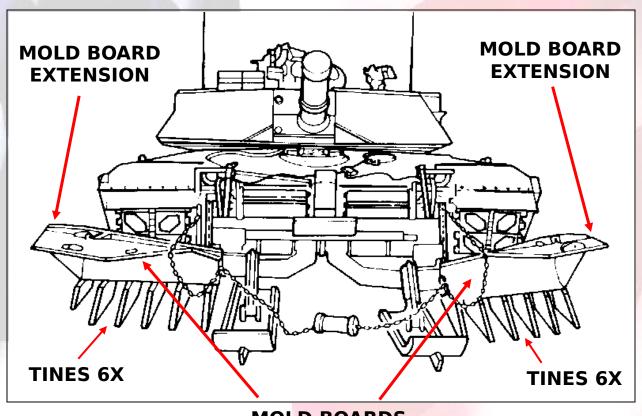
### **SKID SHOES**



SKID SHOES

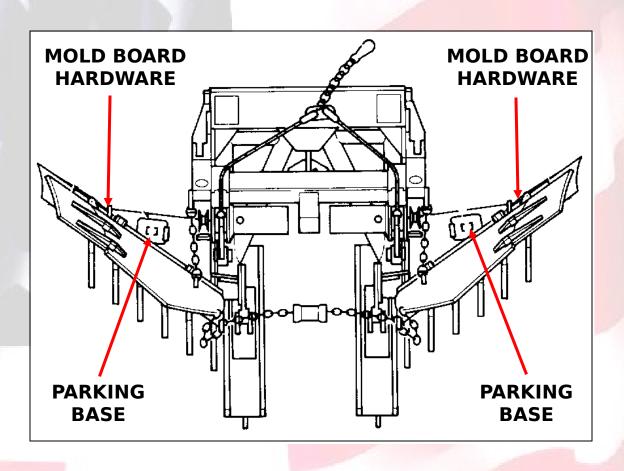
- 1. ANY CRACKS, BROKEN WELDS OR MISSING OR BROKEN PARTS.
- 2. ANY LOOSE MOUNTING BOLTS/NUTS.
- 3. ANY SKID SHOE THAT DOESN'T MOVE FREELY.

# MOLD BOARDS AND EXTENSIONS



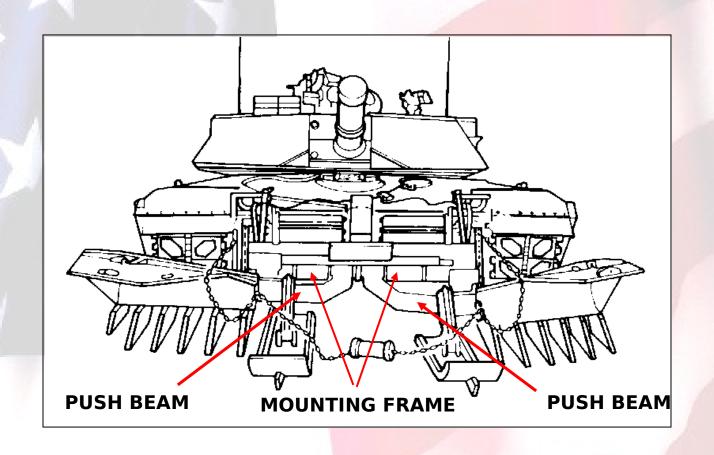
- **MOLD BOARDS**
- 1. ANY BROKEN MOLD BOARD OR EXTENSION CRACKED, BROKEN, OR MISSI
- 2. ANY MISSING MOUNTING HARDWARE.
- 3. 50% OR MORE TINES MISSING FROM A SIDE.

# MOLD BOARD HARDWARE/ PARKING BASE



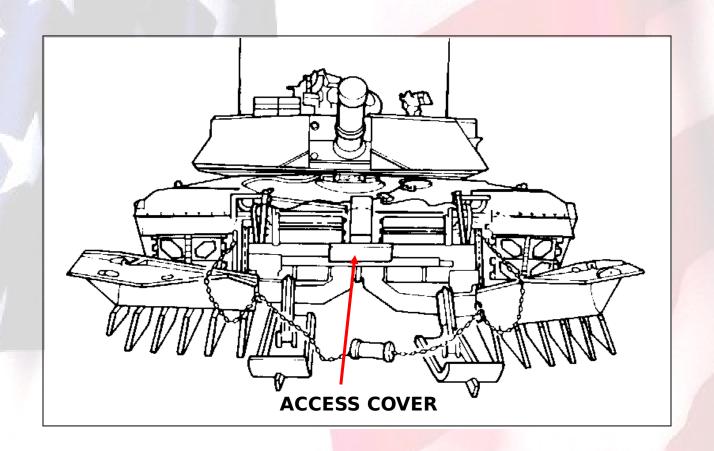
**TOP VIEW** 

## PUSH BEAMS/ FRAME ASSEMBLY



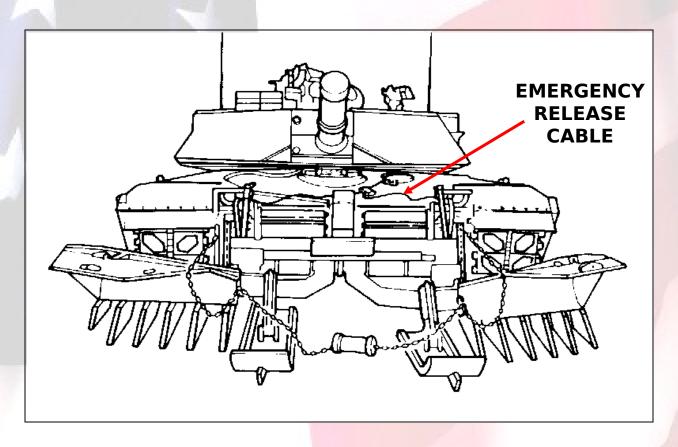
- 1. EITHER PUSH BEAM OR MOUNTING FRAME HAS A BREAK, CRACK OR DAMAGED WELD.
- 2. ANY HARDWARE OR MOUNTING PIN MISSING.

### **ACCESS COVER**



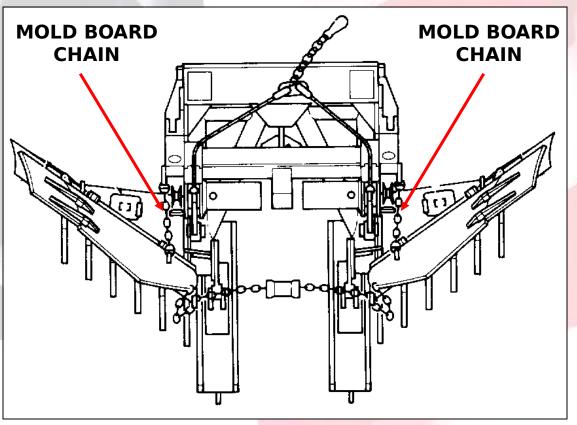
1. CRACKS IN COVER OR MISSING SCREWS OR SEAL.

# EMERGENCY RELEASE CABLE ASSEMBLY



1. BROKEN STRANDS OF WIRE IN CABLE, KINKS, MISSING SNAP HOOKS, BROKEN CHAIN LINKS, MISSING CHAIN ASSEMBLY OR MISSING CABLE ASSEMBLY.

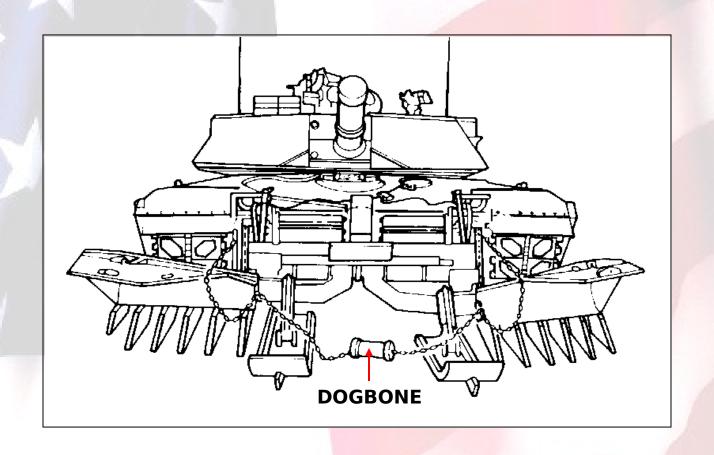
# MOLD BOARD CHAIN ASSEMBLY



**TOP VIEW** 

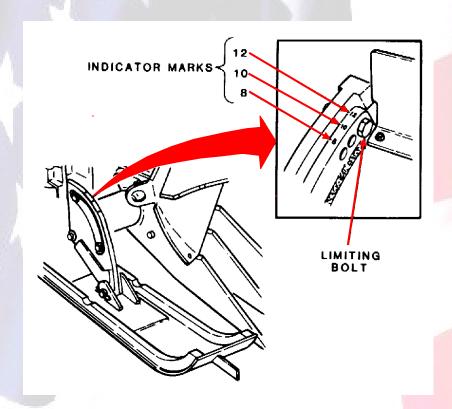
1. ANY CHAIN DISCONNECTED OR BROKEN

### DOGBONE / IDA



1. DOGBONE / IDA AND CHAIN DISCONNECTED, BROKEN OR MISSING.

### **PREPARATION**



#### **ADJUST PLOWING DEPTH**

12 INCHES - SANDY SOIL

**10 INCHES - TOPSOIL** 

8 INCHES - HARD CLAY OR ROCKY SOIL

Recommend setting at 8" for training operations reduces wear and tear on the MCB.

However, the chain of command can auth using 10" or 12" based on METT-T.

-- SKID SHOES ARE HEAVY! TWO MAN TO LIFT IS REQUIRED WHEN ADJUSTING PLOWING
DEPTH.



# Plow / Roller References

- Army TM 9-2590-509-10 APRIL 1990 (Change
- Army TM 9-2590-509-23&P NOVEMBER 2001
- Army TM 5-2590-214-10 APRIL 1999 (Change

# **Mine Plow Maintenance Trends**

- Lifting Mechanisms Inop (motors)
   PMCS/Employment
- Frayed Lifting Straps
   PMCS not being performed to standard
- Linch Pins Missing And Bent PMCS not being performed to standard

# **Mine Plow Maintenance Trends**

- Clevis's
   Missing and broken (PMCS)
- Locking Pins

   Missing and broken (PMCS)
- Half Moon Bolts
   Missing, stripped threads and sheared (PMC)
- Cannon Plug Pins

   Bent, burned and missing pins (drivers failure to properly install plugs)

# Mine Roller Maintenance Trends

- Bleeder Valves
   Missing Screw (PMCS)
- Cannon Plug Pins

   Bent, Burned and Missing Pins (drivers not Properly installing plugs)
- Hub Retaining Locks
   Missing, Loose and Stripped Bolts (PMCS)
- Disk (Roller)
   Excessive Wear
- Tension Cables
   Missing Washers, Improper Adjustment

# **PMCS**

- When: During AA Ops, services, and AOR
- Who: Crew with PL/ PSG executing QC
- Where: On company line (maintain visibility)
- Additional maintenance expertise: Mr Polen (TACOM)

# Recommended Pll (Based On Trends)

### **PLOWS**

Lifting mechanisms
Large clevis's
Small clevis's
Linch pins
Lifting straps
Half moon bolts

### **ROLLERS**

Large retaining nuts
Locking hub Keys

# **Improved Cable Assembly**

- Replaces the Electrical Wiring Harness for Mine
- Increases Drivers Vision from 0% to 87%

### **Improved Cable Components**

Periscope Cable Cable Assembly

NSN 6150-01-458-6873 NSN 6150-01-434-1113